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VERIZON
PATENT MANAGEMENT GROUP
1320 North Court House Road
9th Floor
ARLINGTON, VA 22201-2909

EXAMINER	
DUONG, CHRISTINE T	
ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/815,549	KRZANOWSKI ET AL.	
	Examiner	Art Unit	
	CHRISTINE DUONG	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-7,10-12 and 15-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-7,10-12 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This is in response to the Applicant's arguments and amendments filed on 18 July 2008 in which claims 3-7, 10-12, 15-17 are currently pending.

Claim Objections

1. Claims are objected to because of the following informalities:

2. Regarding claims 7, 10, it is suggested to replace “can be”, in claim 7 lines 25, 30, 34 and claim 10 lines 25, 30, 33, with a positive recited limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. Claims 3-4 and 15-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Okamura et al. (PG Pub US 2004/0184483 A1).

Regarding claims **3 and 15**, Okamura et al. discloses a centralized method and communications system (fig. 5) comprising:

a first node (router 1, fig. 5);

a second node coupled to the first node by a first link (router 2 coupled to router 1, fig. 5);

a third node coupled to the second node by a second link (router 3 coupled to router 2, fig. 5);

a fourth node coupled to the third node by a third link (router 4 coupled to router 3, fig. 5); and

a control node coupled to at least one of said first, second, third (network control device 10 coupled to router 1, router 2 and router 3, fig. 5), and further nodes, said control node including and maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes ("the network control device 10 includes a statistical information collecting unit 11 for collecting pieces of statistical information about the bandwidths in a way that communicates with each of the routers in the network" [0137] lines 3-6 and "the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)" [0141] lines 3-9);

said control node further including: means for receiving a service request corresponding to the first node ("the user terminal 20 side notifies the network control device 10 of a request for the bandwidth, etc" [0145] lines 3-4) and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request ("the route calculation unit 14 for GS executes the searching process as to whether or not there is the route that meets the quality with respect to the notified quality parameter (S104). This searching process uses pieces of link statistical information such as a link using ratio, a link bandwidth reservation value, a link delay, etc., which are stored on the statistical information database" [0213] lines 1-7).

means for generating link bandwidth utilization information corresponding to said second link from an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control and a sum of services which will use said second link which said control node authorized ("the load balancing control unit 15 calculates allocations of individual flows to the plurality of routes. At this time, the load balancing control unit 15 calculates a load balancing process on the basis of the statistical information collected by the network control device 10 or the request bandwidth information stored on the network information database 12 by the user request processing unit 13" [0185] lines 3-9 and "the load balancing control unit 15 calculates a load state of the path set within the network at the present, and judges whether or not the load state of the path comes to a state of congestion. Simultaneously, the load balancing control unit 15 calculates a balancing ratio of the BES flow between the routes" [0186] lines 1-6 and "the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)" [0141] lines 3-9).

Regarding claims **4 and 16**, Okamura et al. discloses everything claimed as applied above (see claims 3 and 15). In addition, Okamura et al. discloses said link bandwidth utilization information corresponding to said second link is further generated as a function of a link utilization scaling factor ("the load balancing control unit 15 calculates a balancing ratio of the BES flow between the routes" [0186] lines 5-6 and

"C1 is a coefficient representing an occupying ratio of the GS flow in the link" [0103] lines 1-2).

Claim Rejections - 35 USC § 103

4. Claim 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. further in view of Riggan et al. (US Patent No. 5,898,673).

Regarding claims **5 and 17**, Okamura et al. discloses everything claimed as applied above (see claim 4 and 16). In addition, Okamura et al. discloses best effort Internet traffic is carried over said second link and where said link bandwidth utilization information corresponding to said second link is further generated as a function of the physical link capacity of links used to couple Internet service users to said second link and an average of the physical link capacity which is used over a period of time by said users for Internet service ("When an average bandwidth per BES flow can be predicted, for instance, in the case of the network where a main application of BES can be specified, a bandwidth required for BES can be calculated from the number of BES flows and from characteristics of the application" [0110] lines 5-10).

However, Okamura et al. fails to specifically disclose that best effort Internet traffic is carried over said second link, as claimed.

Nevertheless, Riggan et al. teaches "if the signal from the network management system 206 indicates that the QoS threshold is exceeded, then at least a first portion of the data, e.g., excess cells, are routed to node 300b via one or more of the secondary networks 212a-212c. The particular secondary network is chosen based upon the type of data which is to be transmitted. More particularly, the voice, data and video streams

may be classified according to adaptation layer type" (Riggan et al. column 4, lines 56-63) and further "AAL Type 3/4 data streams may be routed to a PBX via a PPP (point to point protocol) link, to an ISDN router via the PPP link, an ISDN public network via a PPP link, or via a LAN router Type 3/4 data streams may be routed to a frame relay access device, a frame relay network, an X.25 network, any of a variety of wireless data networks, Internet or other miscellaneous analog/digital data networks. Finally, AAL Type 5 data streams may similarly be routed to frame relay access devices, frame relay networks, X.25 networks, the Internet, wireless data networks and other miscellaneous analog/digital data networks. It is noted that these lists are not exclusive and are exemplary only. A variety of other secondary networks suitable for transporting traffic of the particular AAL types is contemplated" (Riggan et al. column 5, lines 10-23).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Okamura et al's invention to carry best effort Internet traffic over the second link because "a quality of service (QoS) traffic contract bandwidth limit and a corresponding QoS threshold" can be established (Riggan et al. column 4, lines 36-37).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. and Riggan et al. further in view of Raisanen et al. (PG Pub US 2003/0152028 A1).

Regarding claim **6**, Okamura et al. and Riggan et al. disclose everything claimed as applied above (see claim 5). However, Okamura et al. and Riggan et al. fails to specifically disclose said control node generates a control message to reduce the

amount of bandwidth allocated to best effort traffic on one of said first, second and third links, when a service request for a service requiring a guaranteed amount of bandwidth on said one of said first, second and third links is received and said guaranteed amount of bandwidth is not available due to best effort traffic on said one of said first, second and third links, as claimed.

Nevertheless, Raisanen et al. teaches "the QM may carry this out by changing the parameter values of the traffic shaper of the access node for example by reducing the guaranteed bandwidth of best-effort traffic to 128 kbit/s. However, the guaranteed bandwidth of real-time traffic should not be changed during an IP call because that might have radical effects on the IP call itself" (Raisanen et al. [0060] lines 1-10) and "The terminal 12 may for example list the maximum value of the delay acceptable for the IP call and the bandwidth needed by the call. After having received the request, the CPS asks the QM whether the IP network has enough QoS resources for providing the maximum/minimum QoS parameter values on the route (block 62) between access nodes E and G. To find out this, the OM carries out a calculation using the QoS data included in the QoS database. If the result of the calculation shows that the maximum/minimum QoS parameter values can be provided, the QM advises the CPS to accept the IP call set-up request sent by the terminal 12 (block 63). On the other hand, if the QoS needed by the IP call cannot be provided, the QM advises the CPS to reject the request (block 64)" ([0064] lines 4-17).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to reduce the amount of bandwidth to best effort

traffic on one of the first, second and third links if a service requiring a guaranteed amount of bandwidth is not available because this would accommodate when "measurements show that the QoS situation in the IP network suddenly deteriorates (for example, the delay increases)" (Raisanen et al. [0060] lines 1-2).

6. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. further in view of Hameleers et al. (PG Pub US 2005/0021804 A1).

Regarding claim **7**, Okamura et al. discloses a centralized method of providing admission control functionality in a communications system including a plurality of nodes (fig. 5), said plurality of nodes including a control node (network control device 10, fig. 5), at least a first node (router 1, fig. 5) coupled to a second node by a first link (router 2 coupled to router 1, fig. 5), a third node coupled to the second node by a second link (router 3 coupled to router 2, fig. 5) and a fourth node coupled to the third node by a third link (router 4 coupled to router 3, fig. 5), the control node coupled to at least one of said first, second, third (network control device 10 coupled to router 1, router 2 and router 3, fig. 5), and further nodes;

maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes ("the network control device 10 includes a statistical information collecting unit 11 for collecting pieces of statistical information about the bandwidths in a way that communicates with each of the routers in the network" [0137] lines 3-6 and "the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the

bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)" [0141] lines 3-9);

operating the control node to receive a service request corresponding to the first node ("the user terminal 20 side notifies the network control device 10 of a request for the bandwidth, etc" [0145] lines 3-4) and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request ("the route calculation unit 14 for GS executes the searching process as to whether or not there is the route that meets the quality with respect to the notified quality parameter (S104). This searching process uses pieces of link statistical information such as a link using ratio, a link bandwidth reservation value, a link delay, etc., which are stored on the statistical information database" [0213] lines 1-7);

when it is determined from said maintained set of link bandwidth utilization information that there is insufficient bandwidth available to satisfy said service request ("the route that meets the user request is not discovered as the result of the route search by the route control unit 14, the route control unit 14 notifies the user request processing unit 13 that the route search resulted in being unsuccessful for the user request processing unit 13 (S105). Then, the user request processing unit 13 notifies the user terminal that the acceptance was rejected" [0214] lines 1-8).

notifying the user of the insufficient bandwidth ("the network control device 10 rejects the acceptance of the user request. In this case, the user selects, on the

acceptance result screen 101b, whether to make a request for other content or to reserve a receipt of the content on the basis of this request after an elapse of a predetermined time" [0146] lines 10-15 and further "where the route that meets the user request is not discovered as the result of the route search by the route control unit 14, the route control unit 14 notifies the user request processing unit 13 that the route search resulted in being unsuccessful for the user request processing unit 13 (S105). Then, the user request processing unit 13 notifies the user terminal that the acceptance was rejected. After notifying that the user terminal of the rejection of the acceptance, the network control device 10 moves to a process in S109" [0214]).

However, Okamura et al. fails to specifically disclose that determining if a user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request and when it is determined that said user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request, presenting the user with the option of terminating the services being provided to said user which can be used to provide the bandwidth required to satisfy the service request, as claimed.

Nevertheless, Hameleers et al. teaches "determines that the available bandwidth of 14.4 kbps is not enough to carry both the audio and video stream, and in the example of FIG. 4b, the procedure implemented in control procedure 10 is such that the application decides to close one or more of the media streams, e.g. the video stream" (Hameleers et al. [0060] lines 6-11) and "the user should have the possibility of setting

the control procedure such that certain media streams are preferably dropped or preferably re-added, in accordance with the decrease or increase in available bandwidth" (Hameleers et al. [0061] lines 5-9) and "if a mobile terminal desires to establish a communication in which video and audio data is to be sent in respective streams, but the set-up request is only answered by the allocation of an insufficient amount of bandwidth, then the control procedure can adapt to the allocated bandwidth by e.g. only feeding an audio stream and a control stream into the connection having the allocated bandwidth" (Hameleers et al. [0016] lines 10-16).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to allow a user to determine the termination of the user's other services to provide the bandwidth required to satisfy the service request and to present the user with the operation of terminating the services being provided to said user which can be used to provide the bandwidth required to satisfy the service request because "if a mobile terminal desires to establish a communication in which video and audio data is to be sent in respective streams, but the set-up request is only answered by the allocation of an insufficient amount of bandwidth, then the control procedure can adapt to the allocated bandwidth by e.g. only feeding an audio stream and a control stream into the connection having the allocated bandwidth" (Hameleers et al. [0016] lines 10-16).

Regarding claim **10**, Okamura et al. discloses a centralized method of providing admission control functionality in a communications system including a plurality of nodes (fig. 5), said plurality of nodes including a control node (network control device

10, fig. 5), at least a first node (router 1, fig. 5) coupled to a second node by a first link (router 2 coupled to router 1, fig. 5), a third node coupled to the second node by a second link (router 3 coupled to router 2, fig. 5) and a fourth node coupled to the third node by a third link (router 4 coupled to router 3, fig. 5), the control node coupled to at least one of said first, second, third (network control device 10 coupled to router 1, router 2 and router 3, fig. 5), and further nodes;

maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes ("the network control device 10 includes a statistical information collecting unit 11 for collecting pieces of statistical information about the bandwidths in a way that communicates with each of the routers in the network" [0137] lines 3-6 and "the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)" [0141] lines 3-9);

operating the control node to receive a service request corresponding to the first node ("the user terminal 20 side notifies the network control device 10 of a request for the bandwidth, etc" [0145] lines 3-4) and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request ("the route calculation unit 14 for GS executes the searching process as to whether or not there is the route that meets

the quality with respect to the notified quality parameter (S104). This searching process uses pieces of link statistical information such as a link using ratio, a link bandwidth reservation value, a link delay, etc., which are stored on the statistical information database" [0213] lines 1-7);

when it is determined from said maintained set of link bandwidth utilization information that there is insufficient bandwidth available to satisfy said service request ("the route that meets the user request is not discovered as the result of the route search by the route control unit 14, the route control unit 14 notifies the user request processing unit 13 that the route search resulted in being unsuccessful for the user request processing unit 13 (S105). Then, the user request processing unit 13 notifies the user terminal that the acceptance was rejected" [0214] lines 1-8).

However, Okamura et al. fails to specifically disclose that determining if a user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request and when it is determined that said user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request, presenting the user with the option of terminating the services being provided to said user which can be used to provide the bandwidth required to satisfy the service request and operating the control node to receive a replay from said user indicating a desire to terminate services or not to terminate services, denying said service request when said reply indicates a desire not to terminate services, granting said service request when said reply indicates a desire to terminate services.

Nevertheless, Hameleers et al. teaches “determines that the available bandwidth of 14.4 kbps is not enough to carry both the audio and video stream, and in the example of FIG. 4b, the procedure implemented in control procedure 10 is such that the application decides to close one or more of the media streams, e.g. the video stream” (Hameleers et al. [0060] lines 6-11) and “the user should have the possibility of setting the control procedure such that certain media streams are preferably dropped or preferably re-added, in accordance with the decrease or increase in available bandwidth” (Hameleers et al. [0061] lines 5-9) and “Reference sign 509 indicates the acknowledgment with which the application in media stream providing equipment stream informs the communication equipment that the new data rate has been accepted, namely once the necessary streams have been closed. Finally, at 510, the communication informs the network that the new data rate has been accepted” (Hameleers et al. [0063]) and "the order of media streams to be closed in case not enough bandwidth is available anymore to carry all media streams” (Hameleers et al. [0067]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to allow a user to determine the termination of the user’s other services to provide the bandwidth required to satisfy the service request and present the user with the option of terminating the services being provided to said user which can be used to provide the bandwidth required to satisfy the service request and operating the control node to receive a replay from said user indicating a desire to terminate services or not to terminate services, denying said service request when said

reply indicates a desire not to terminate services, granting said service request when said reply indicates a desire to terminate services because "if a mobile terminal desires to establish a communication in which video and audio data is to be sent in respective streams, but the set-up request is only answered by the allocation of an insufficient amount of bandwidth, then the control procedure can adapt to the allocated bandwidth by e.g. only feeding an audio stream and a control stream into the connection having the allocated bandwidth" (Hameleers et al. [0016] lines 10-16).

Regarding claim **11**, Okamura et al. and Hameleers et al. discloses everything claimed as applied above (see claim 10). However, Okamura et al. fails to specifically disclose operating the control node to terminate at least some services provided to said user and to reallocate at least some of the bandwidth used by said services to providing the requested service.

Nevertheless, Hameleers et al. teaches "Reference sign 509 indicates the acknowledgment with which the application in media stream providing equipment stream informs the communication equipment that the new data rate has been accepted, namely once the necessary streams have been closed" (Hameleers et al. [0063] lines 1-5).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to operate the control node to terminate at least some services provided to said user and to reallocate at least some of the bandwidth used by said services to providing the requested service because "if a mobile terminal desires to establish a communication in which video and audio data is to be sent in

respective streams, but the set-up request is only answered by the allocation of an insufficient amount of bandwidth, then the control procedure can adapt to the allocated bandwidth by e.g. only feeding an audio stream and a control stream into the connection having the allocated bandwidth" (Hameleers et al. [0016] lines 10-16).

Regarding claim **12**, Okamura et al. and Hameleers et al. discloses everything claimed as applied above (see claim 10). In addition, Okamura et al. discloses providing information to said user through a web interface indicating which services are available for termination ("Considered as this quality guaranty request is means such as displaying a quality guaranteed service menu as a Web page provided by the network from on the network control device 19 and prompting the user terminal 20 side to select a service, and so forth" [0144] lines 6-10).

Response to Arguments

In response to Applicant's argument regarding claim 3 that Okamura does not describe an estimate of bandwidth that will be used, the examiner respectfully disagrees. Okamura discloses "the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)" ([0141] lines 3-9). This shows that information regarding reserved bandwidth that can be used is stored. Therefore, Okamura does disclose an estimate of bandwidth that will be used.

In response to Applicants' argument regarding claim 3 that Okamura does not teach or suggest “an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control", the examiner respectfully disagrees. Okamura discloses "it is possible to reduce a probability of coming to the state of congestion also in the case of an abrupt increase in forwarding quantity of the BES flow" [0072]. This shows a flow that the control node does not have admission control since it will cause a state of congestion. Therefore, Okamura discloses an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control.

In response to Applicant’s argument regarding claim 5 that Riggan does not teach or suggest “the physical link capacity of links used to couple Internet service users to said second link", the examiner respectfully disagrees. Okamura discloses “When an average bandwidth per BES flow can be predicted, for instance, in the case of the network where a main application of BES can be specified, a bandwidth required for BES can be calculated from the number of BES flows and from characteristics of the application” ([0110] lines 5-10) and further “the network information database 12 is stored with IP addresses of connecting destination interfaces. Then, the network information database 12 is stored with respective pieces of bandwidth information of the link's physical bandwidth (WL), the bandwidth reserved for the GS flow(WG), the bandwidth reserved for the BES flow(WB), the bandwidth actually used for the GS flow(Wg), and the bandwidth actually used for the BES flow(Wb)” ([0141]). Therefore,

Okamura discloses the physical link capacity of links used to couple Internet service users to said second link.

In response to Applicant's argument regarding claim 6 that Raisanen does not teach or suggest "when a service request for a service requiring a guaranteed amount of bandwidth on said one of said first, second and third links is received and said guaranteed amount of bandwidth is not available" and "generating a control message to reduce the amount of bandwidth allocated to best effort traffic on one of said first, second and third links", the examiner respectfully disagrees. Raisanen discloses "The terminal 12 may for example list the maximum value of the delay acceptable for the IP call and the bandwidth needed by the call. After having received the request, the CPS asks the QM whether the IP network has enough QoS resources for providing the maximum/minimum QoS parameter values on the route (block 62) between access nodes E and G. To find out this, the OM carries out a calculation using the QoS data included in the QoS database. If the result of the calculation shows that the maximum/minimum QoS parameter values can be provided, the QM advises the CPS to accept the IP call set-up request sent by the terminal 12 (block 63). On the other hand, if the QoS needed by the IP call cannot be provided, the QM advises the CPS to reject the request (block 64)" [0064] lines 4-17). This shows that a service request where the guaranteed amount of bandwidth is not available. In addition, Raisanen discloses "the QM may carry this out by changing the parameter values of the traffic shaper of the access node for example by reducing the guaranteed bandwidth of best-effort traffic to 128 kbit/s. This shows that the bandwidth for best effort traffic is reduced. Therefore,

Raisanen discloses when a service request for a service requiring a guaranteed amount of bandwidth on said one of said first, second and third links is received and said guaranteed amount of bandwidth is not available and generating a control message to reduce the amount of bandwidth allocated to best effort traffic on one of said first, second and third links.

In response to Applicant's argument regarding claim 7 that Hameleers et al. does not teach or suggest "notifying the user of the insufficient bandwidth", the examiner respectfully disagrees. Okamura et al. discloses "the network control device 10 rejects the acceptance of the user request. In this case, the user selects, on the acceptance result screen 101b, whether to make a request for other content or to reserve a receipt of the content on the basis of this request after an elapse of a predetermined time" [0146] lines 10-15 and further "where the route that meets the user request is not discovered as the result of the route search by the route control unit 14, the route control unit 14 notifies the user request processing unit 13 that the route search resulted in being unsuccessful for the user request processing unit 13 (S105). Then, the user request processing unit 13 notifies the user terminal that the acceptance was rejected. After notifying that the user terminal of the rejection of the acceptance, the network control device 10 moves to a process in S109" [0214]. This shows that user is notified of the insufficient bandwidth. Therefore, Okamura et al. discloses notifying the user of the insufficient bandwidth.

In response to Applicant's argument regarding claim 7 that Hameleers et al. does not teach or suggest "presenting the user with the option of terminating the services

being provided", the examiner respectfully disagrees. Hameleers et al. discloses "determines that the available bandwidth of 14.4 kbps is not enough to carry both the audio and video stream, and in the example of FIG. 4b, the procedure implemented in control procedure 10 is such that the application decides to close one or more of the media streams, e.g. the video stream" (Hameleers et al. [0060] lines 6-11) and "the user should have the possibility of setting the control procedure such that certain media streams are preferably dropped or preferably re-added, in accordance with the decrease or increase in available bandwidth" (Hameleers et al. [0061] lines 5-9) and "if a mobile terminal desires to establish a communication in which video and audio data is to be sent in respective streams, but the set-up request is only answered by the allocation of an insufficient amount of bandwidth, then the control procedure can adapt to the allocated bandwidth by e.g. only feeding an audio stream and a control stream into the connection having the allocated bandwidth" (Hameleers et al. [0016] lines 10-16). This shows that the user has the option of terminating one of the services being provided. Therefore, Hameleers et al. discloses presenting the user with the option of terminating the services being provided.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is (571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/
Supervisory Patent Examiner, Art Unit 2416

/Christine Duong/
Examiner, Art Unit 2416
11/21/2008